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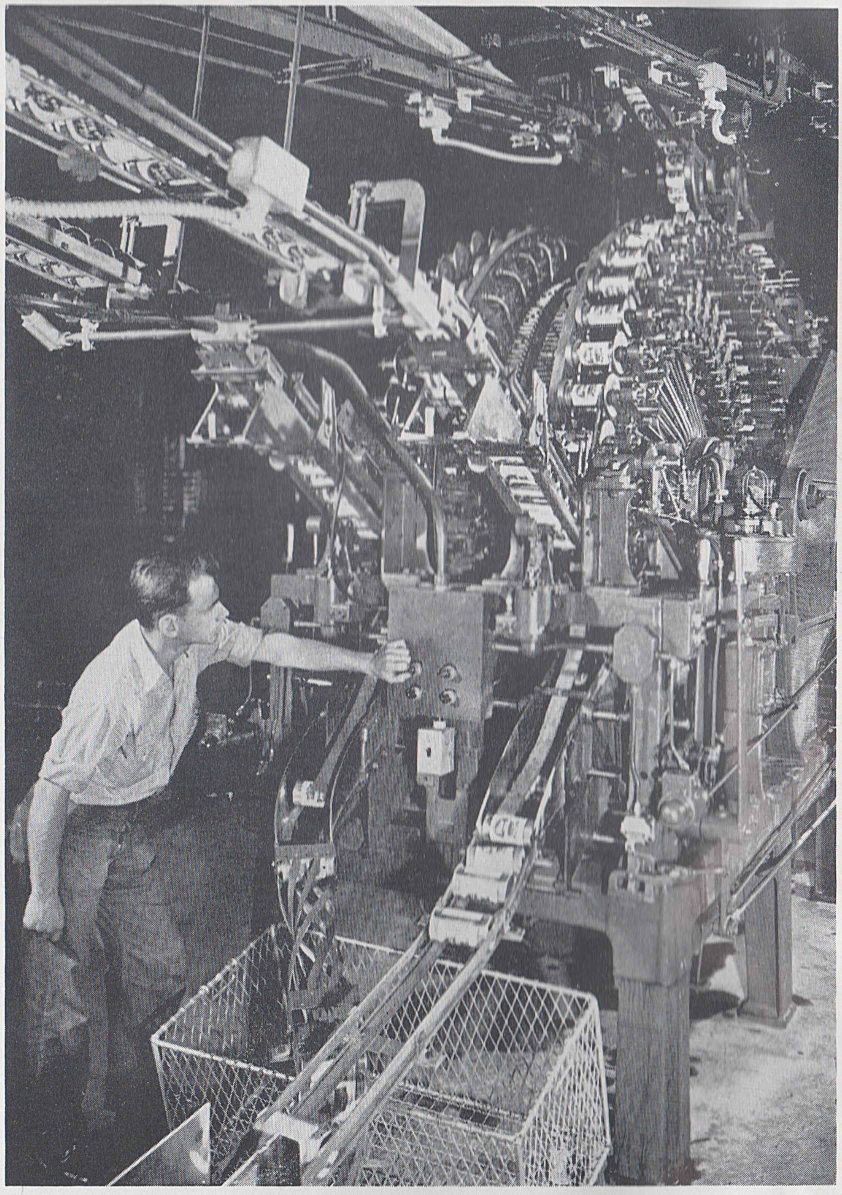
TIN

AMERICAN UNION • WASHINGTON, D. C.



This machine tests up to 400 tin cans a minute, automatically rejecting any defective ones

TIN

THE HISTORY of tin is that of the ages.

Like copper, it is one of the few metals fabricated by the earliest man. Tin made possible the bronze bells that tolled in Chinese temples two thousand years before the birth of Christ. Tin had its place in ancient Egypt's civilization, and it was for tin that Phoenician seafarers set sail on the long haul around Gibraltar to the mines of the northwest coast of Spain and the "Tin Islands." Tin from Cornwall mines was fused in the swords of Caesar's legions, and tin in more recent times has been the backbone of all the armies of Toyland.

Tin respects neither geographical boundary nor topographical formation throughout the world. Its deposits have been washed out of the steaming Malay Peninsula, and picked out of veins in the sky-scraping Andes. No continent seems to be entirely lacking in some of this silvery white metal. Of the total world output, Asia supplies 64 per cent at present; South America, 12 per cent; Africa, 10 per cent; Europe, 11 per cent; and other areas, three per cent. The principal tin-producing countries are Malaysia, Bolivia, Indonesia, Thailand, Nigeria, and the Republic of the Congo (Leopoldville). Lesser producing areas are located in China, India, Australia, Japan, the Republic of South Africa, the United Kingdom, Portugal, Argentina, Brazil, Canada, and Mexico. Of the average world mine production of 177,660 long tons in the period 1952-60, Latin America furnished 14 per cent. Of the total production in 1961 of 188,000 long tons, Bolivia accounted for 20,408.

What Is Tin?

The dictionary defines tin as "a chemical element obtained (by smelting cassiterite) as a soft, lustrous white, crystalline metal, malleable at ordinary temperatures, but brittle when heated." Cassiterite or tinstone is the only ore which produces tin alone, although traces of tin often occur in silver, copper, and other ores. Tinstone is native tin dioxide (SnO_2), and usually appears as a brown or black mineral. The chemical symbol for tin is Sn, derived from the Latin word *stannum*. Tin has a specific gravity of 7.28, an atomic weight of 118.7, a melting point of 449 F., and a weight per cubic foot of about 455 pounds.

While the properties of tin as an alloy and a protective coating for other metals have been known for centuries, the great impetus to world production and trade in this metal came with its manufacture into tin plate for food and other containers. More than half of all tin plate produced today is used in making cans. Tin plate is a thin steel sheet (98.5 per cent

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Cover: Stockpile of tin "pigs" in New York warehouse.

Deep in the bowels of the rugged Andes lie Bolivia's tin deposits

by weight), covered by a thin protective coating of tin (1.5 per cent).

The manufacture of tin plate, solder, bronze, and brass utilized more than 80 per cent of the United States tin consumption in 1960 and 1961. Bronze is an alloy of copper and tin; and brass is an alloy of copper and zinc. Solder is used in molten form to join metallic surfaces. Galvanizing is the process of coating other metals with tin.

Tin in the Western Hemisphere

Nature endowed Bolivia with a practical monopoly of America's tin deposits, for no important ones are known to exist in the Western Hemisphere beyond Bolivia's boundaries. Tin production began around 1870 and surpassed silver as Bolivia's chief export commodity after 1900. For many years Bolivia was second only to Malaya (now Malaysia) in world production, but gradually dropped to third place after China. Ninety-eight per cent of Bolivia's mining production consists of non-ferrous metals, of which tin represents 75 per cent.

By comparison with Bolivia, the following tin-producing countries of the Hemisphere mine negligible quantities of the ore: Argentina, Brazil, Canada, Mexico, Peru, and the United States. Domestic mine production in the United States, which in 1960 was 10 long tons, comes mainly from placer deposits in Alaska and from molybdenum mining in Colorado, the tin being recovered as a by-product.

Bolivian Indians make ready their balsas for sailing on Lake Titicaca

Although nothing is more commonplace in our daily lives than tin cans, tin foil, and tin soldiers (among the "small fry"), the story of tin in America has many fascinating and colorful angles, unknown to many people.

The trail of tin leads to the very roof of the world—the Bolivian *altiplano*—an immense highland plateau at more than 12,000 feet above sea level, rimmed by snow-capped ranges of the mighty Andes. One important

World Mine Production of Tin (content of ore)
1952-1962
(long tons)

Country	1952-56 (average)	1957	1958	1959	1960	1961	1962
NORTH AMERICA							
Canada	218	317	355	334	278	389	307
Mexico	469	473	544	377	365	530	577
United States	92			50	10	..........[1]	[1]
SOUTH AMERICA							
Argentina	137	182	205	225	244	350[2]	515[2]
Bolivia (exports)	30,074	27,794	17,731	23,811	19,406	20,408	21,493
Brazil	185	293	409	380	1,556	..........[3]	..........[3]
Peru	7	12	30	25	25	17	11
Total Western Hemisphere	31,182	29,071	19,274	25,202	21,884	..........[3]	....
Total Europe	14,500	17,000	17,200	18,600	20,100	23,200	20,300
Total Asia	118,700	126,000	95,100	97,300	117,000	120,200	123,000
Total Africa	25,160	26,405	19,736	18,062	20,354	18,636	19,784
Total Oceania (Australia)	1,867	1,952	2,237	2,351	2,202	2,593	2,650
Total World (estimate)	191,400	200,400	153,500	161,500	181,500	188,000	190,200

Source: Minerals Yearbook, 1961, Bureau of Mines, U.S. Dept. of the Interior

[1] Figure withheld to avoid disclosing individual company confidential data; included in world total.

[2] Estimated

[3] Data not available; estimate included in world total.

group of tin mines is located near Lake Titicaca, the highest navigable body of water in the world, where the Indians build and sail their unique boats called *balsas*. This is the land of the haughty *llama*—that ancient beast of burden which refuses to carry a load which exceeds a certain weight—of the *alpaca,* and the rare and highly-prized *vicuña*.

The majority of Bolivian Indians who work in the mines are descendants of the Quechuas, who before the Spanish Conquest formed part of the great Inca Empire. Centuries-old bronze objects, left by the Quechuas in the Lake Titicaca region, indicate that this resourceful tribe knew how to combine tin and copper to produce a superior alloy. Like their ancestors, the Bolivian Indians of today wear bright-colored wool ponchos and knitted *chullos* (helmets) for protection against the biting wind and cold of the altiplano; while the women brighten the drab landscape with their typical dress, composed of several layers of colored woolen skirts, topped by lovely hand-woven *mantas* (shawls) and a felt boater hat.

Only such hardy humans as the barrel-chested Bolivian Indians can withstand the rugged life and excessively high altitude of the altiplano. Few persons who are not natives of the region can live in the tin mining centers, without making periodic trips to lower altitudes, due to the unaccustomed strain on the heart and lungs.

The Spanish conquerors exploited Bolivia's incredibly rich silver mines for almost three centuries, but apparently ignored the tin, which was discarded on dumps as worthless. It was not until the early part of the twentieth century that Bolivian tin began to assume importance. Of the three pioneers who developed the industry in Bolivia after the turn of the century, the name of Simón Patiño and his fabulous success story have become almost legendary. Born in 1868 in Cochabamba, Simón Ituri Patiño was working as a collector for a commercial company in the town, when he unexpectedly found himself in possession of a tin mine property through circumstances which usually occur only in fiction. A customer who owed his employer money, offered to settle his account by turning over to him his claim to a tin mine. Patiño accepted but his employer, disgusted with him for failing to return with a cash settlement, fired him and told him to keep the "worthless claim" in lieu of back wages due him.

Penniless and out of a job, Patiño decided that the only thing left to do was to work the despised claim himself. So he set out for Espíritu Santo Hill in 1897 to examine his property, taking along a few tools, some canned and dried food, and a pair of burros. In his excavations he hit upon a vein of ore which proved to be almost pure tin oxide, worth over $500 a ton. The news spread rapidly and he was offered a million dollars for his claim. However, he turned down the offer upon the advice of his wife and bought additional mining properties. This was the origin of the company Patiño

The land of tin is also the home of the alpaca and the llama

Old Spanish church at an Indian town on the Bolivian altiplano

La Paz—seat of the Bolivian Government and "tin capital" of America

Mines and Enterprises Consolidated, founded in 1914.

The other two figures in the famous tin triumvirate of Bolivia were Carlos Víctor Aramayo—a Bolivian born in Paris and educated as a mining engineer, before becoming general manager and later president of the *Compagnie Aramayo de Mines en Bolivie*—and Mauricio Hochschild. A German mining engineer and industrialist, the latter came to South America in 1911 and founded the South American Minerals and Merchandise Company.

In 1952, the Bolivian Government nationalized the mines and properties of the Patiño, Hochschild, and Aramayo companies and entrusted their administration and operation to the Corporación Minera de Bolivia (Comibol), the Bolivian Mining Corporation. The State also assumed the monopoly of the exportation of minerals and sales in foreign countries. Although the subsoil, including all mineral deposits, is a part of the domain of the State, private companies are permitted by law to explore for tin, to obtain concessions for exploitation, and to export the ore on payment of a royalty as provided by law in 1961.

In addition to Comibol, which operates the three large nationalized mines, there are several private enterprises classified as "medium" or "small," variously controlled by British, Chilean, United States, and Bolivian and United States stockholders.

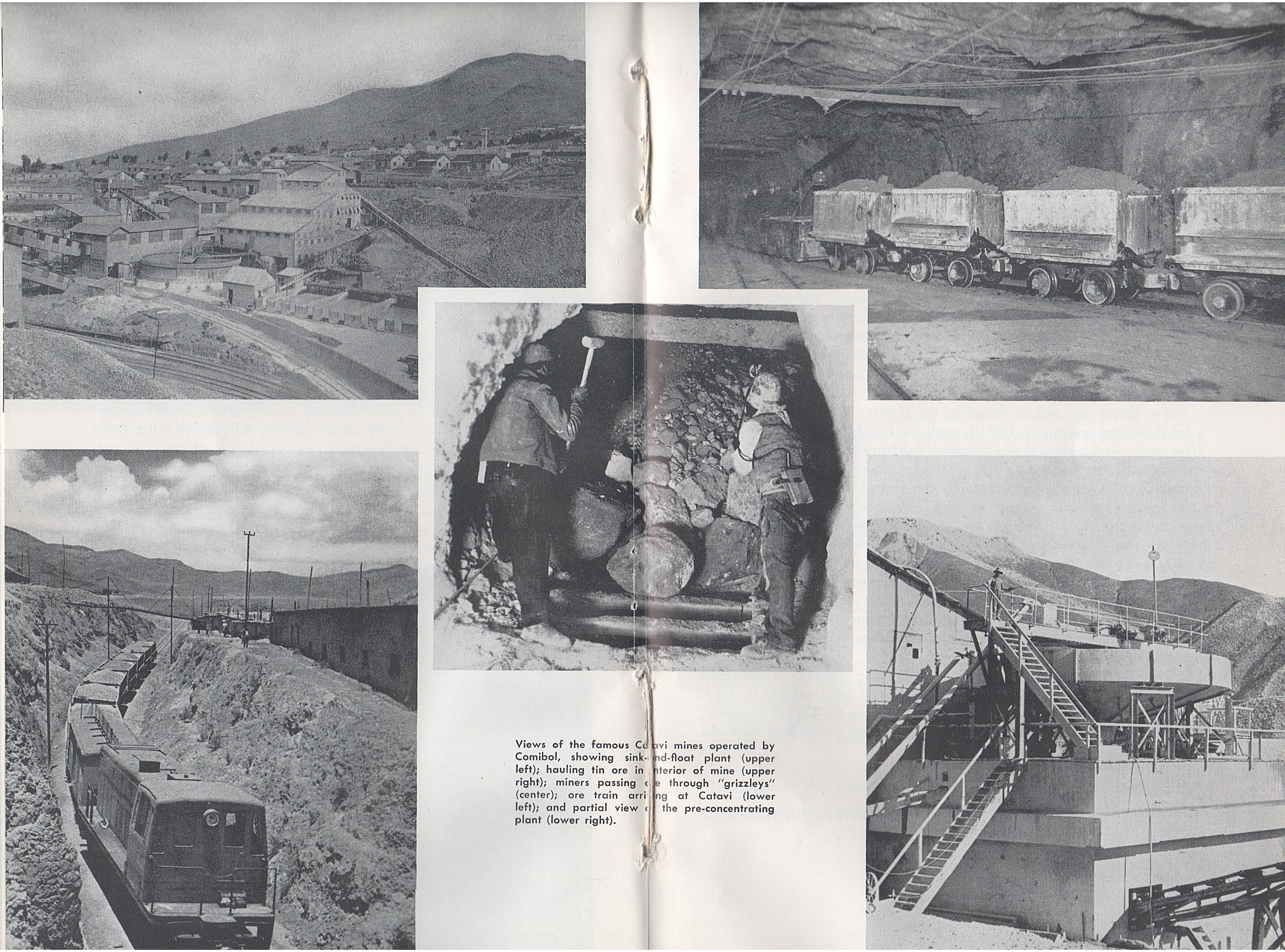
Bolivia's Tin Resources

Bolivia's tin resources are the cornerstone of the Bolivian economy, the major source of national wealth and government revenue. The tin ores are closely associated with other minerals, chiefly those bearing silver and pyrite, and others bearing copper, lead, tungsten, and bismuth.

Bolivia's tin belt comprises an area roughly 500 miles long and 60 miles wide, extending from the eastern edge of the altiplano northwest to the Peruvian border, and south to the Argentine frontier. The mines are situated at elevations ranging from 12,000 to 16,000 feet above sea level, while some of the surrounding peaks of the Andes rise to heights of more than 21,000 feet. The tin belt is composed of four principal zones designated by the names of the chief city or mining center of each: La Paz, in the north; Oruro, in the center; Chorolque, in the south; and Potosí, in the east. There are mines on Potosí Mountain—famed in Spanish colonial days as the "hill of silver"—which are said to have been worked continuously for the past 400 years. One early principle of the mining code developed at Potosí and generally known as the "tunnel right", permitted a miner to tunnel into the hills for tin either vertically or horizontally, so long as he did not encounter other workings. This apparently simple rule was the cause of much bloodshed for centuries, as rival miners sought to control as much ore as possible.

Bolivian cassiterite (tinstone) occurs in lode or underground veins and is mined much the same as coal. Mining operations are costly in Bolivia,

Bolivia's tin deposits are found in terrain such as this, in the highlands near Oruro



Views of the famous Catavi mines operated by Comibol, showing sink-and-float plant (upper left); hauling tin ore in interior of mine (upper right); miners passing ore through "grizzleys" (center); ore train arriving at Catavi (lower left); and partial view of the pre-concentrating plant (lower right).

as compared with other countries, due in part to the nature of the deposits. The ore is confined principally to narrow veins, varying from a few inches to 6-8 feet in width, placed at such angles and depths that deep tunnels must be constructed to work them. The operation requires the use of electric drills and dynamite to loosen the ore, the erection of expensive elevators or cable lines for moving it, and the installation of other costly machinery to grind and concentrate it. The ore must be crushed, roasted, and washed before it reaches the smelter. In many other tin areas of the world, notably the Far East, the ore is dredged from the bottom of shallow streams or other alluvial deposits, where nature crushes and washes the ore to a considerable extent, leaving little artificial concentrating to be done.

Bolivia's tin reserves have fallen off considerably since 1950, due in part to the exhaustion of many principal veins and failure to discover new ones to replace them. Also, the average tin content of the ores has declined from around eight per cent to less than three per cent since the end of World War II, while most of the new deposits contain complex ores that are difficult to concentrate for smelting. Output in the nationalized mines dropped for eight consecutive years as a result of the above situation, combined with the low productivity of the miners, lack of sufficient modern equipment, and the unsettled domestic situation.

To remedy this serious situation, the Bolivian Government launched a rehabilitation program in 1961 through the Bolivian Mining Corporation (Comibol), with technical and financial assistance from abroad. New ore deposits are being sought by a United Nations mission engaged in geological explorations. A consortium formed by the United States, West Germany, and Argentina aims to provide technical assistance to both the mines and the mills. Substantial assistance in financing the overall rehabilitation program was extended by the U.S. Agency for International Development (AID) and by the Inter-American Development Bank in 1961-63.

The rehabilitation program includes replacement of some equipment, purchase of additional machinery, improvement of transport facilities, identification of additional tin reserves, and improved metallurgical techniques. By the end of 1963, the downward trend in mine output had been checked.

The importance of tin exports to the Bolivian economy is evidenced by the fact that tin accounted for 73 per cent of total exports in 1961. Of Bolivia's total exports in 1962, 64 per cent went to the United Kingdom, 30 per cent to the United States, and six per cent to the Federal Republic of Germany.

Milling Methods in Bolivia

The object of the milling process in Bolivia is to make a rich tin concentrate

from a poor ore, usually mixed with sulphide minerals. Gravity is the usual method employed to make the ore concentrate, and this is followed either by calcining the concentrate in order to burn out the sulphur and arsenic it contains, or by fine grinding and elimination of the sulphides by flotation. After calcination the concentrates are usually passed through a magnetic separator to take out the iron. Where flotation is employed, the non-flotable product is treated on concentrating tables and in buddles (inclined troughs in which water washes out the lighter materials).

A few decades ago most of the tin concentrates in Bolivia were made by hand-sorting, jigging (a rotating process accompanied by jets of water), and washing. At present, these primitive methods account for only about 15 per cent, or less, of the total Bolivian tin output. By such methods, women pick over the ore by hand, breaking the larger lumps with a small hammer and removing rich fragments down to a quarter-inch size. The ore is then crushed finer with a "quimbellete," or crusher weighing about 500 pounds, which is rocked on a hard flat surface onto which the ore is fed. The crushed ore is concentrated in hand-jigs, and the fine portions then washed in troughs. This process is repeated until all possible foreign matter has been removed.

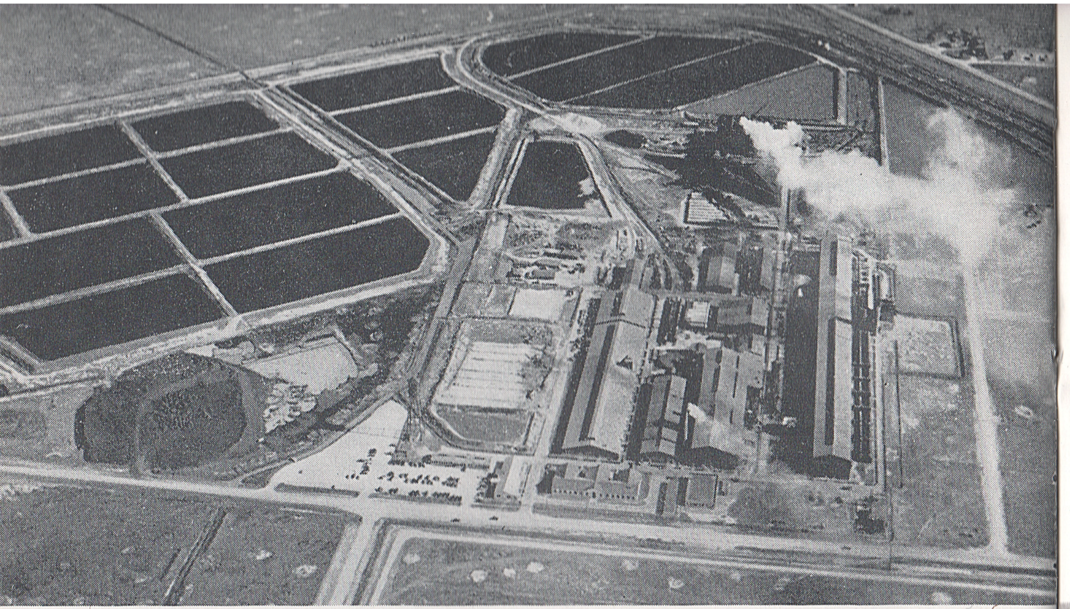
Smelting

Before the outbreak of the Second World War, more than one-half of the world's tin ore was smelted in the Straits Settlements (Malay Peninsula). The Malayan tin-smelting plants at Penang and Singapore were the world's major source of pre-war pig tin. These smelters handled tin from the Federation of Malaya, Indonesia, Thailand, Burma, Japan, and South Africa. Next in pre-war importance were the smelters of the United Kingdom, the Netherlands, and Belgium. One-fourth of the mine output was smelted in the United Kingdom, this coming from Bolivia, Nigeria, and Cornwall. Smaller tin smelting industries were located in China, Germany, Australia, and France. Due to problems created by the war, the Longhorn Smelter was built by the United States Government at Texas City, Texas, in 1941 and began operations in 1942.

While Latin America does not now have a major tin smelter, there are several small plants located in Argentina, Brazil, Mexico, and Peru. Of these, the most important one is at Volta Redonda, Brazil. This plant, which currently depends on imported concentrates, recently installed an electrolytic smelter said to be capable of reducing Bolivian concentrates. Several other very small smelters exist in Brazil.

Operation of the Longhorn Smelter

This is the only smelting plant in the Western Hemisphere capable of



Aerial view of the Longhorn Smelter, Texas City, built during World War II

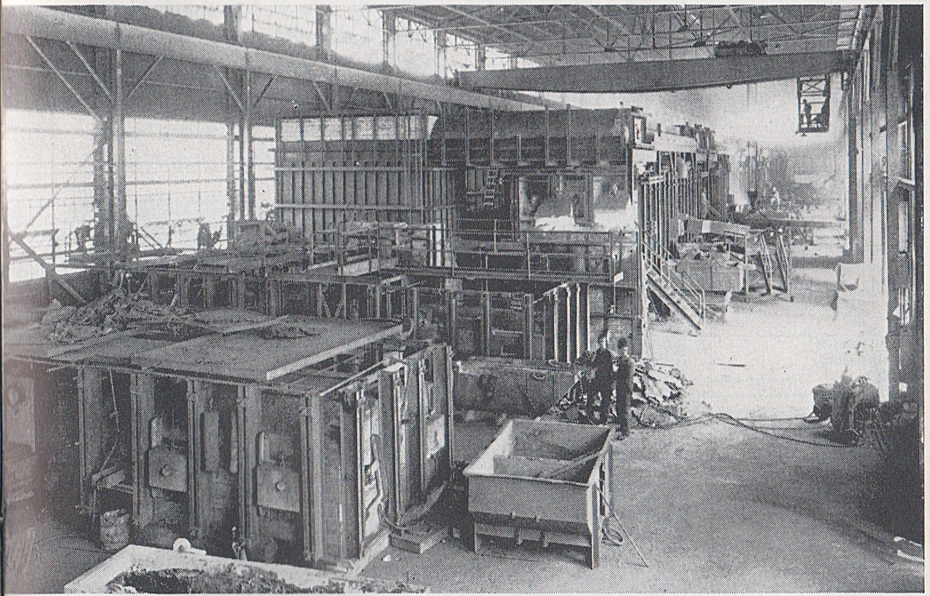
treating all types of ore in great volume. It produced more than two-fifths of the world's metallic tin in 1946. Bolivia's output of tin ore was processed by the Longhorn Smelter during World War II. From the end of the war until 1955, Bolivia exported its tin in roughly equal shares to the United States and the United Kingdom. In 1956 and later years, however, Bolivia exported virtually all of its tin concentrates to the United Kingdom, as the Texas City smelter went temporarily out of use.

After ownership was transferred to the Wah Chang Corporation, the Longhorn Smelter resumed operations on a limited basis in 1958, tin concentrate from Indonesia being the principal source of raw materials until mid-1962. The following year, the smelting of Bolivian tin was resumed. The U.S. Agency for International Development is currently financing a research program, carried on by the Wah Chang Corporation, in the technology of concentrating and smelting.

The smelting process at Longhorn consists of the following steps. The tin concentrates, which arrive at the smelter in sacks weighing 50 *kilos* or 110 pounds, are emptied into a sample mill bin. The ores are then blended on a mixing floor into various lots for smelting, mixed with salt and ground coke and roasted in a rotary kiln to reduce the iron to the ferrous state, and to chloridize the lead and silver. The roasted ore is leached in spherical tanks with acid-proof linings in a solution of hydrochloric acid at 100 degrees F., to remove iron and other undesirable impurities before smelting.

When leaching is complete, a filter screen is placed over the manhole, the tank is inverted, and air pressure is applied until the filter cake is blown fairly dry. The leached residue is smelted in separate lots in eight reverberatory furnaces. About 85 per cent of the tin is recovered as crude bullion and the remainder is retained in a low silica slag. The slag from the primary furnaces is re-smelted in a larger furnace to recover the tin as an iron-tin alloy, known as "hard-head." The hard-head is granulated and returned to the primary furnaces for re-smelting.

The crude bullion is drossed and then held at a temperature slightly above the smelting point to permit formation of crystals of the metallic compound, $FeSn_2$. These crystals are removed by filtering the hot metal through a porous tile metal filter, giving a bullion containing only about 0.006 per cent. Arsenic, antimony, and bismuth are removed as a dross by successive additions of metallic aluminum, molten sulphur, and sodium hydroxide. The refined bullion is stored in a reverberatory furnace, from which it is removed and cast into "pigs."



Interior view of furnace building, Longhorn Smelter, showing reverberatory furnaces

Production and Consumption in the United States

The United States is the leading consumer of tin, followed by the United Kingdom and West Germany. Because domestic mine production is insignificant, the bulk of the tin consumed in the United States is imported in the form of concentrates or smelted "pigs" and bars. United States' total tin consumption increased by more than 800 long tons in 1962.

The principal tin items in the foreign trade of the United States since 1960 are imports of metallic tin, high-tin alloys, and tin concentrates; and exports of tin plate and tin cans. Indonesia supplied the bulk of tin (for consumption of tin concentrate), with Bolivia, Mexico, and Thailand furnishing relatively insignificant quantities. In 1961, imports from Indonesia amounted to slightly over 8,500 long tons; from Bolivia, 262 long tons; and from Mexico, 87. In the same year, the chief suppliers of tin imported in the form of bars, blocks, pigs, and other categories were Malaysia (32,955 long tons), the United Kingdom (2,810 long tons), and Bolivia (1,677 long tons).

Tin plate, solder, bronze, and brass currently consume more than 80 per cent of the tin in the United States. Consumption of tin in tin plate (the leading use of primary tin) varies between 50 and 60 per cent of the total. The United States required 43 per cent of the world consumption of tin for tin plate in 1962 and nearly 90 per cent of this was used for making cans.

The following table indicates the United States' production, consumption, and trade for the years 1952 through 1962:

Salient Tin Statistics
(long tons)

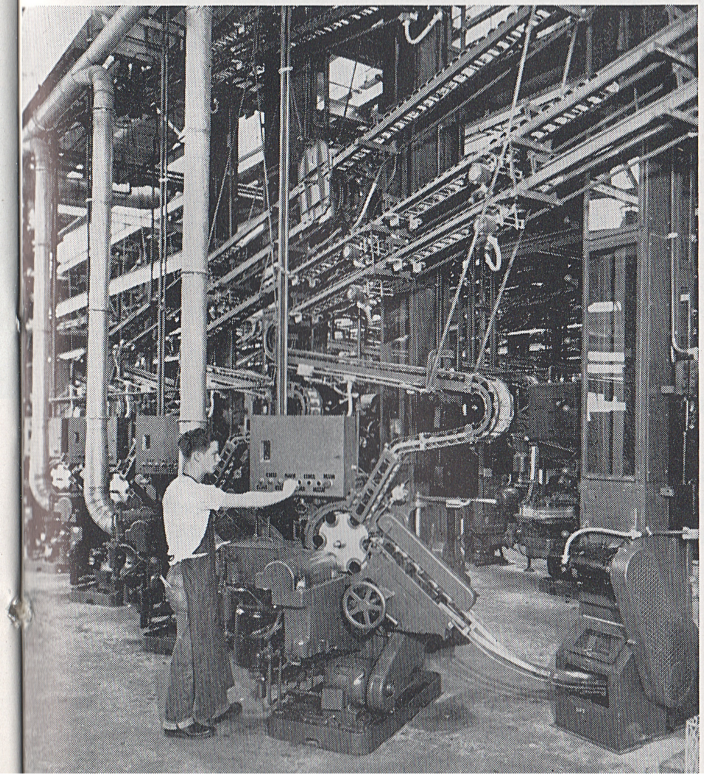
	1952-56 (average)	1957	1958	1959	1960	1961	1962
United States							
Production:							
Mine	91.72			50	10	(1)	(1)
Smelter	[2] 25,547	1,564	(1)	(1)	(1)	(1)	(1)
Secondary	28,074	24,260	22,810	23,700	22,050	21,690	21,040
Imports for consumption:							
Metal	69,623	56,158	41,149	43,578	39,538 [3]	39,898	41,408
Ore (tin content)	24,281	94	5,440	10,773	14,026	8,917	5,364
Exports:	681	1,531	1,341	1,371	857	800	435
Consumption:							
Primary	54,801	54,429	47,998	45,833	51,530	49,699	54,602
Secondary	30,750	28,078	24,587	31,540	29,030	28,551	24,483
Price: Straits tin, New York, average cents per pound	100.80	96.17	95.09	102.01	101.40	113.27	114.61
World							
Production:							
Mine	191,400	200,400 [3]	153,500 [3]	161,500 [3]	181,500 [3]	188,000	190,200
Smelter	193,600	195,100	158,400	[3] 155,700	[3] 192,400	190,000	196,300

Source: Division of Minerals, Bureau of Mines, Department of the Interior, 1962.
[1] Figures withheld to avoid disclosing individual company confidential data.
[2] Includes tin content of alloy made directly from ore.
[3] Revised figure.

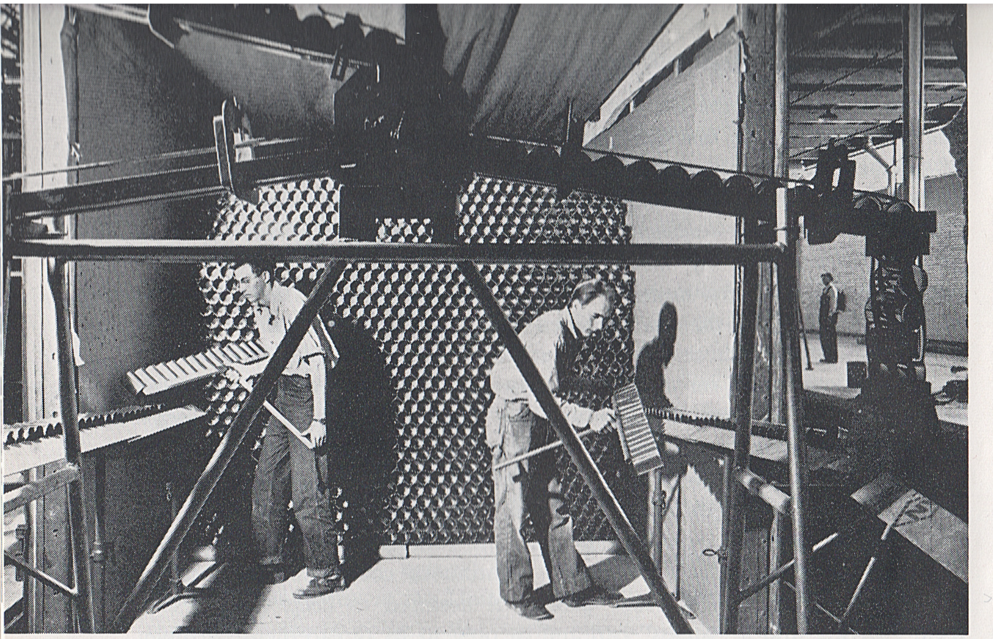
The Canning Industry

In the evolution of the tin can over a period of more than 150 years—since 1810, when the first one was patented in England—the manufacture of metal containers and the canning industry have been completely revolutionized. According to the American Can Company, which for years has maintained large research laboratories, the original hole-and-cap type of can remained basically the same until the beginning of the twentieth century, when the modern sanitary can with one end entirely open was developed. Up to 1940, the can remained strictly a tin plate container.

World War II accelerated adoption of the electrolytic process for tin-coating steel plate for can manufacture, making possible much thinner applications of the metal. The average metal container in use today contains less than two per cent tin, while cans for many non-food products contain no tin at all. In recent years a highly important new process for manufacturing "thin" tin plate has been perfected. This major development in the basic steel industry permits the rolling of steel to a greater thinness than ever before; a thinner, continuous coating of tin is then applied to the steel. This new process is destined to keep the tin can from evolving into a "tinless" can and to prevent its replacement by other competitive metals. Many tinplate manufacturers have expanded facilities for producing thin tin plate. An important development in Latin America is the growth of the tinplate industry.



An American Can Company employee operates a sprayer, which coats inside of cans prior to filling and sealing



A freight car being loaded with cans from automatic conveyor at an American Can Company factory

Nearly 90 per cent of the tin plate consumed in the United States is used for making cans. Food-canning took 63 per cent of the cans and non-food products, the balance, according to the Bureau of Mines (U.S. Department of the Interior) in its Minerals Yearbook for 1962. The Bureau reported that the tonnage of tinplate shipments to canmakers rose two per cent to a new record; while can shipments increased three per cent to the highest total ever recorded. Fruits, vegetables, and fruit and vegetable juices were the leading products packed; beer ranked second, and the production of beer cans rose three per cent. The consumption of cans for soft drinks, fish, seafood, and pet foods also reached new peaks in 1962. On the other hand, cans for coffee remained virtually unchanged; while evaporated and condensed milk cans showed the largest loss in terms of metal consumed.

International Tin Agreement

Since World War II, the international market for tin has experienced more radical changes than, perhaps, the market for any other basic Latin American export commodity. With a view to stabilizing the market and seeking solutions to serious problems within the industry, representatives of eight major tin-producing and consuming countries met in London in 1946 and agreed to the establishment of a study group.

The International Tin Study Group, which came into existence in 1947, evolved ultimately into the International Tin Council. The initial step toward a solution of the tin problem was the First International Tin Agreement, ratified in 1954 by governments of major tin-producing and consuming countries with the exception of the United States, West Germany, the U.S.S.R., and China.

The five-year plan established by the Agreement aimed to maintain an equilibrium between supply and demand, prevent or alleviate unemployment in the industry, maintain adequate supplies of tin, and control world market prices and sales through buffer-stock operations financed by signatories to the Agreement. The Second International Tin Agreement, which went into force in 1961 for a five-year period, operates on the same principles as the first one.

The World Tin Council holds the buffer stocks, and the stock manager sells or purchases tin in accordance with market fluctuations above or below a predetermined price range established by the Agreement. The Council also establishes the export quotas of the producing countries when the market shows depressive tendencies. The United States is not a member of the Council, but actively cooperates with it.

The decline of world tin prices in 1956-57 was stemmed by purchases of tin by the buffer-stock manager and the imposition of export quotas. The upward trend of tin prices for the last six years reached its highest point since the Korean war during the first quarter of 1964. At the same time, consumption exceeded production; buffer stocks were exhausted; and, consequently, there was no need for quotas.

PHOTO CREDITS

American Can Company: p. 2, 17, 18; Braniff International Airways: p. 4, 7; Grace Line: p. 9; Patiño Mines & Enterprises Consolidated: p. 10 and 11; Reconstruction Finance Corporation: front cover. p. 14, 15.

This booklet, one of the Commodity Series, was prepared by the Department of Public Information with the collaboration of the Department of Economic Affairs, Pan American Union.

The Organization of American States (OAS) is the regional organization of the Western Hem created to achieve an order of peace and justice, to promote solidarity, to strengthen collaboration, defend the sovereignty, territorial integrity, and independence of the member states. These sta Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, E El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Trinidad and Toba United States, Uruguay, and Venezuela.

The ideal of Western Hemisphere unity was conceived by the Liberator Simón Bolívar and found expression in the Treaty of Union signed at the Congress of Panama in 1826. The present organizatio outgrowth of the International Union of American Republics, created in 1890 during th International Conference of American States, held in Washington, D. C.

The inter-American system was reorganized and given its present name in a Charter adopted at th International Conference of American States (Bogotá, Colombia, 1948). The Charter incorp principles and procedures evolved by the member states for cooperative action on matters of c interest and mutual welfare, and consolidated and strenthened inter-American institutions. The O functions through six principal organs and various special agencies and commissions.

1. The Inter-American Conference, supreme organ of the Organization, which meets every five decide general action and policy.
2. The Meeting of Consultation of Ministers of Foreign Affairs, which meets on request to c problems of an urgent nature of common interest, and which serves as the Organ of Consulta deal with threats to the peace and security of the Continent, as provided for in the Inter-Ar Treaty of Reciprocal Assistance, signed at Rio de Janeiro in 1947.
3. The Council, which is composed of one representative from each state. It may act provisio Organ of Consultation. The Council has three organs: the Inter-American Economic and Council, the Inter-American Council of Jurists, and the Inter-American Cultural Council.
4. The Pan American Union, which is the central and permanent organ and General Secretariat OAS, with headquarters in Washington, D. C.
5. he Inter-American Specialized Conferences, which deal with special technical matters and specific aspects of inter-American cooperation.
6. The Inter-American Specialized Organizations, which have specific functions with respect to te matters of common interest to the American states. There are six such agencies: The Inter-Am Children's Institute, the Inter-American Commission of Women, the Inter-American Indian In the Inter-American Institute of Agricultural Sciences, the Pan American Health Organization, Pan American Institute of Geography and History.

Through these organs and agencies, the OAS functions effectively to strengthen the peace and s of the Continent; to prevent possible cause of difficulties and to ensure the pacific settlement of di to provide for common action in the event of aggression: to deal with political, juridical, and ec problems that may arise among the American States: and to promote, by cooperative actio economics, social, and cultural development.

The structure and method of functioning of the OAS will be altered when the amendments Charter approved at the Third Special Inter-American Conference (Buenos Aires, Argentina: 1967 into force upon ratification by two thirds of the signatory states.

Pan American Union, General Secretariat
Organization of American States
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